

Claims

- [c1] 1.A CD drive comprising:
- a upper cover having a track;
- a disk tray installed below the upper cover in a slidable manner;
- a clamp installed on the upper cover in a moveable manner;
- a push piece installed on the disk tray; and
- a guiding rod having a first end fixed on the push piece, and a second end slidably installed in the track;
- wherein when the disk tray slides in or slides out of the upper cover, the guiding rod slides along the track to drive the push piece to push the clamp upward so as to prevent the clamp from scraping an optical disk.
- [c2] 2.The CD drive of claim 1 wherein one end of the push piece is pivot connected to the disk tray.
- [c3] 3.The CD drive of claim 2 wherein the track has a curved section, and the pivot connection is installed on a first side of the disk tray; and when the disk tray slides out of the upper cover, the track drives the guiding rod to move to the first side so that the push piece rotates to the first side to push the clamp upward.

- [c4] 4.The CD drive of claim 3 wherein when the disk tray slides out of the upper cover and the optical disk has left the underside of the clamp, the track drives the guiding rod to move to an opposite side of the first side so that the push piece comes back to the former position.
- [c5] 5.The CD drive of claim 1 wherein the track is a groove etched into the upper cover.
- [c6] 6.The CD drive of claim 5 wherein the push piece has a hole and the first end of the guiding rod is fixed in the hole.
- [c7] 7.A CD drive comprising:
 - a disk tray having a guiding track;
 - a upper cover installed above the disk tray;
 - a clamp installed on the upper cover in a moveable manner;
 - a push piece installed on an inner side of the upper cover; and
 - a guiding rod fixed on the push piece;
wherein when the disk tray slides in or slides out of the upper cover, the guiding rod slides along the guiding track to drive the push piece to push the clamp upward so as to prevent the clamp from scraping an optical disk.
- [c8] 8.The CD drive of claim 7 wherein the guiding track is an

iron track, and the guiding rod is a magnetic rod.

- [c9] 9.The CD drive of claim 7 wherein the guiding track is a magnetic track, and the guiding rod is an iron rod.
- [c10] 10.The CD drive of claim 7 wherein the guiding track is a magnetic track, and the guiding rod is a magnetic rod.
- [c11] 11.The CD drive of claim 7 wherein one end of the push piece is pivot connected to the disk tray.
- [c12] 12.The CD drive of claim 11 wherein the upper cover further comprises a recess and the second end of the push piece further comprises a pillar having one end fixed on the recess in a slidable manner, when the disk tray slides in or out of the upper cover, the pillar slides along the recess.
- [c13] 13.The CD drive of claim 12 wherein the recess has a curved shape.
- [c14] 14.The CD drive of claim 11 wherein the guiding track has a curved section, and the pivot connection is installed on a first side of the upper cover; and when the disk tray slides out of the upper cover, the guiding track drives the guiding rod to move to the first side so that the push piece rotates to the first side to push the clamp upward.

[c15] 15.The CD drive of claim 14 wherein when the disk tray slides out of the upper cover and the optical disk has left the underside of the clamp, the guiding track drives the guiding rod to move to an opposite side of the first side so that the push piece comes back to the former position.